

EXHIBIT 1

**PRE-FILED DIRECT TESTIMONY OF
MICHAEL T. HARRELSON, P.E.
(EXCERPTS)**

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Florida Cable Telecommunications
Association, Inc.; Comcast Cablevision of
Panama City, Inc.; Mediacom Southeast, L.L.C.;
and Cox Communications Gulf, L.L.C.,

EB Docket No. 04-381

Complainants,

v.

Gulf Power Company,

Respondent.

**PRE-FILED DIRECT TESTIMONY OF
MICHAEL T. HARRELSON, P.E.**

On behalf of Complainants

March 31, 2006

Vol. 1 of 2

1 **Direct Testimony of Michael T. Harrelson, P.E.**

2 **Background**

3 Q: Would you please state your name, occupation and on whose behalf you are
4 presenting this direct testimony?

5 A: Yes. My name is Michael T. Harrelson. I am a registered professional
6 engineer (Electrical), and an engineering consultant. I am appearing in this proceeding on
7 behalf of the Florida Cable Telecommunications Association, Inc., Cox Communications
8 Gulf Coast, L.L.C., Comcast Cablevision of Panama City, Inc., Mediacom Southeast, L.L.C.,
9 and Bright House Networks, LLC, the "Complainants" in this matter.

10 Q: Would you please summarize your experience and qualifications?

11 A: I have a Bachelor of Science in Industrial Engineering from Georgia Tech,
12 where I was a co-op student while working for Georgia Power Company. I have worked on
13 or around electrical systems and the electricity business for most of my life. I got my start in
14 the business working part time for my father's business, Harrelson Electric Co. when I was
15 11 years old. I started working at Georgia Power in electric distribution in their co-op
16 program, where I also began work toward my BS when I was 18, in 1963. Except for a two-
17 year period from 1970 to 1972 when I served as an officer in the United States Army, I was
18 at Georgia Power in various districts and in various capacities of electric distribution,
19 engineering, construction and maintenance until April, 1992. From 1992 until the present, I
20 have done consulting work in the same field. I am a registered professional engineer in
21 Georgia and Florida. A more detailed rendering of my work history is included in my CV
22 which is attached as Harrelson Exhibit 1 ("MTH Ex. 1").

1 Q: Have you had any experience in working with joint use of electric distribution
2 poles by communications companies?

3 A: Yes. I have had extensive experience in that area.

4 Q: Do you have knowledge of the National Electrical Safety Code ("NESC"), as
5 well as the engineering and construction practices of electric utilities, telephone companies
6 and cable operators?

7 A: Yes I do. The NESC is the national safety standard for electric supply stations
8 and electric supply and communication lines. The current edition is ANSI C2-2002. The
9 purpose of these rules for lines is the practical safeguarding of persons during the installation,
10 operation, or maintenance of electric supply and communication lines and associated
11 equipment. This code is not intended as a design specification or as a construction manual.
12 The NESC rules contain the basic provisions that are considered necessary for the safety of
13 employees and the public under the specified conditions. If the responsible party wishes to
14 exceed these rules, he may do so for his own purposes, but need not do so for safety
15 purposes. NESC compliance is mandatory in Florida for electric power and communications
16 companies.

17 I consider myself to be an expert in the NESC and its application.

18 Q: Why is that?

19 A: As I mentioned a moment ago, I have been working on or around electrical
20 systems for nearly 47 years. I worked for Georgia Power Company for a total of 27 years,
21 including during the late 1960s and early 1970s when the first cable television systems were
22 built in Georgia, and elsewhere around the country. Since I was at Georgia Power until
23 1992, I also witnessed the upgrade and rebuild of improved generations of cable television

1 systems and saw how both cable companies and pole owners, including especially power
2 companies, worked together to complete these system upgrades and rebuilds. Since retiring
3 from Georgia Power I have worked as a consulting engineer and an expert witness to electric
4 companies, cable companies and others.

5 Q: Have you ever been qualified as an expert witness previously?

6 A: Yes.

7 Q: In what subjects or fields have you been so qualified?

8 A: I have been qualified as an expert in (1) the National Electrical Safety Code
9 requirements; (2) electric power distribution design, construction, engineering, operation, and
10 maintenance procedures; (3) joint use of utility poles by power and communications
11 companies; (4) OSHA electric power and communications safety regulation; and (5) the
12 National Electric Code, which applies to electric power utilization systems.

13 Q: On how many occasions have you given testimony as an expert witness in
14 these areas?

15 A: I have testified either in deposition or at trial approximately 37 times in the
16 past 16 years.

17 Q: Do you have additional relevant experience?

18 A: Yes. I have participated in more than 100 pieces of litigation or accident
19 investigations as consultant.

20 In matters closely related to some issues in this proceeding, I have testified in a pole
21 attachment dispute before the Utah Public Service Commission. That dispute involved
22 attachment permitting procedures, engineering guidelines for attachments, and interpretation
23 of the NESC.

1 In addition, in a similar dispute in Arkansas, I have submitted written testimony to the
2 FCC and participated in a mediation session before the FCC. I have also submitted written
3 comments to the Louisiana PSC in a proceeding to reconsider regulations regarding pole
4 attachment procedures in Louisiana.

5 Q: Are there other aspects of your training and background that may be relevant
6 to your report?

7 A: Yes. I think so. I regularly attend conferences on joint use, conduct training
8 sessions, and conduct pole-line inspections for pole owners like electric utilities that are not
9 unlike the pole identifications that are in part at issue in this proceeding. Through these
10 activities I am very familiar not only with standard industry practices as they relate to outside
11 aerial utility plant and joint use, but am also very familiar with the trends and "state-of-the-
12 art" of utility and communications company practices in this area.

13 Q: Has your work been limited to field work?

14 A: No. I have been working with joint use issues for approximately 40 years. In
15 addition to working at the field level where the daily work is performed, I have also worked
16 at the administrative and supervisory levels. My experience also includes working with pole-
17 attachment applications by third parties (such as cable companies).

18 I have consulted as a Registered Professional Engineer in joint use contract
19 interpretation and application for 14 years. This includes inspecting joint use facilities;
20 training field engineers and line workers in the NESC, Joint Use contracts and safe-work
21 rules; and negotiating specific separation, clearance and arrangement requirements (some of
22 which are additional requirements imposed by power companies). I have also negotiated
23 procedures, techniques and schedules to complete safety audits, make-ready engineering,

1 make-ready construction and post-inspection for joint use projects. I have prepared and
2 conducted workshops or seminars for national joint use conferences and personally
3 conducted several NESC code compliance audits. I have also prepared the necessary make-
4 ready engineering for power companies and communications companies to correct violations
5 uncovered during those audits. Additionally, I have been President of local utility
6 coordinating committees in Brunswick and Milledgeville, Georgia, and periodically have
7 attended national joint use conferences.

8 Q: Please describe your work as President of the local utility coordinating
9 committees?

10 A: These organizations are established to foster better communication among the
11 different industries and users that need to use poles and rights-of-way. We discuss, design
12 and implement ways to accommodate safe, practical and timely access and use of the limited
13 facilities that each of these different companies needs to use to provide their services.

14 Q: Are these committees to facilitate joint use of poles?

15 A: Yes, in part. Other issues such as joint trenching, right-of-way restoration,
16 road maintenance and tree-trimming are also considered. But the principal motive for these
17 particular organizations and ones like them is to provide a forum for inter-industry
18 understanding and finding real-world solutions to real-world problems in the operations of
19 electric, telephone, CATV, gas and governmental organizations.

20 **Participation In This Proceeding**

21 Q: Could you please explain what your assignment from the Complainants was in
22 this proceeding?

1 A: Certainly. I was asked to review materials relating to Gulf Power's claim,
2 under a test set forth in *Alabama Power v. FCC*, 311 F.3d 1357 (11th Cir. 2002), for a
3 substantial increase in annual pole rent for Complainants' attachments to Gulf Power's
4 distribution poles and review any Gulf Power documents, discovery or other materials
5 produced. I was asked to prepare expert testimony relating to matters within my area of
6 expertise. In particular, I was asked to form an opinion of when utility poles may be said to
7 be "at full capacity" and to evaluate data relating to specific poles identified by both Gulf
8 Power and by the Complainants with regard to whether such poles could, consistent with
9 standard electric industry procedures and Gulf Power's own practices, be said to be at full
10 capacity and other matters that might arise.

11 Q: What must be considered in defining "poles at full capacity?"

12 A: A reasonable definition of when utility poles may be said to be "at full
13 capacity" must be consistent with the requirements of the NESC and should be consistent
14 with standard electric industry practices. Standard industry practice for electric utility
15 companies, including Gulf Power Company, which must comply with the NESC, is to
16 perform "make-ready" engineering and construction to accommodate communications
17 attachments, including cable TV attachments, on poles used for electric power distribution.
18 Make-ready may be defined as the design process necessary to determine how and if a pole
19 or poles can accommodate additional facilities being contemplated, and if deemed
20 appropriate, the construction work necessary to add the facility. Make-ready, including
21 design and construction, is frequently thought to apply only to make-ready for
22 communications attachments or rearrangement. It also applies to additional power facility
23 attachments and rearrangement. Step one of the design process is to identify existing

1 violations of the NESC. The NESC violations must be corrected whether the additional
2 facilities are actually installed or not. Step two is to design the desired facility addition. The
3 make-ready design for an additional communications attachment may or may not require
4 steps such as the moving of other attachments including power on existing poles or replacing
5 existing poles with incrementally taller ones or setting additional poles in line. The party for
6 whom make-ready (rearrangements, pole changeouts or interset poles) is required to provide
7 space for a new attachment, usually pays the cost of such make-ready. The make-ready
8 process is expressly provided for in Gulf Power's *CATV Permitting Procedure*. That
9 procedure states:

10 Gulf engineer will decide if the attachment location described on
11 the Permit has appropriate clearances (meets all NESC and Gulf
12 Specifications etc.) and poles are of sufficient strength (not rotten)
13 to support CATV attachments. Engineer will make one of the
14 following choices: (a) No Make-ready Needed (NWR). Engineer
15 says it is safe (no NESC or Gulf Specification violations and pole
16 is of sufficient strength) for the CATV to attach. No work required
17 (NWR) or (b) Make-ready Needed (DSO). If line work on Gulf's
18 poles is needed for CATV Company to safely attach, then the
19 Engineer will promptly prepare a DSO.

20 Gulf's procedure further states that once the CATV Company pays the costs of any required
21 make-ready work, which will "provide space for Licensee's attachments as shown on [the]
22 DSO," Gulf Power will issue a permit to attach. Thus, in the field and in reality, whether a
23 pole is genuinely at full capacity does not depend on the condition of a pole at a fixed

1 moment in time but upon the potential of a pole or replacement pole(s) at a given location to
2 accommodate attachments, in accordance with NESC rules (a performance standard) and
3 Gulf Power's own practices and construction standards. The pole component of a power line
4 is very dynamic. Harrelson Exhibit 2 ("MTH Ex. 2") (Gulf's CATV Permitting Procedure").

5 Q: In light of electric industry custom and Gulf Power's own procedures, what, in
6 your opinion, is a reasonable definition of when a pole may realistically be said to be "at full
7 capacity"?

8 A: A pole at full capacity should be defined as a pole which could not be
9 strengthened enough if it is too weak, rearranged if its attached facilities are improperly
10 installed or out of place, re-spaced if poles are too far apart, or replaced with a taller and/or
11 stronger pole to accommodate a desired new attachment by Power or Communication.
12 Reasonable examples of poles at full capacity might include poles already at maximum
13 design height under overhead transmission lines, poles near airport runways with their height
14 limited by the Federal Aviation Administration, or poles whose height is limited by local
15 government regulations. The percentage of total poles which reasonably fit this category is
16 very small.

17 Q: Would you please summarize your findings with respect to Gulf Power's
18 definition of when a pole is at full capacity?

19 A: Yes. Gulf Power's definition, which is stated on page 4 of the March 4, 2004
20 Statement of Work ("SOW") prepared by its pole surveyor, Osmose, equates a "full
21 capacity" pole with a "crowded pole," and essentially defines a crowded pole as a pole with
22 any of various "NESC vertical clearance violations" between Gulf Power's electric
23 equipment or wires and communications attachments. Three of the six alleged NESC

1 violations are Gulf requirements which exceed the NESC requirements. Gulf's definition
2 itself was apparently expanded during the Osmose pole survey, since the list of alleged
3 NESC violations cataloged by Osmose and set forth in the Appendices to the SOW is greater
4 than those clearance violations actually listed in the definition on page 4 of the Osmose
5 SOW. The additional requirements added by Osmose were Requirements for: 12"

6 separation between communication cables

7 12" separation between communication drops

8 30" separation between communications and power lines

9 (including neutrals) in spans between poles

10 40" separation between power guys and communications on poles

11 4' separation between CATV anchors and power anchors.

12 These requirements were all added to the original definition as alleged violations. Harrelson
13 Exhibit 3 ("MTH Ex. 3") (Osmose SOW, with revised appendices).

14 Q: Have you reached an opinion about the reasonableness of Gulf Power's
15 proposed definition of "full capacity"?

16 A: Yes, I have. Gulf's definition is neither a realistic nor a workable definition of
17 "full capacity." Gulf disregards the actual, dynamic nature of poles in a joint use utility
18 system. In adopting the definition in the Osmose statement of work as contained in revised
19 Appendix A, Gulf gives no consideration to whether and how make-ready work, which must
20 be performed to comply with the NESC and which is an integral part of Gulf's own pole
21 attachment permitting procedures, could correct safety violations and lead to the availability
22 of space for a new attachment. Any of these alleged violations are used by Gulf to claim that
23 a pole is at full capacity regardless of the effect of simply correcting the violation.

1 A few examples clearly illustrate the unreasonableness of Gulf's definition. If the
2 violation is a missing bond wire between a CATV ground and a Gulf ground and it is then
3 bonded as required by the NESC, Gulf's definition would nevertheless require that pole to be
4 considered full capacity. If a 50-foot pole had a TV cable attached at less than 52 inches
5 below power at 27 feet above ground, that pole would be forever considered full by Gulf
6 because there is not room above CATV for another attachment. There would be almost 10
7 feet of available space below CATV. The outrageous examples could go on and on. Gulf's
8 original definition includes only one instance of make-ready engineering – it contemplates
9 that if a pole has a low communications cable, and make-ready is designed to raise that cable
10 to meet a minimum height requirement, then a pole would be considered "crowded" if, after
11 the make-ready work, a power-to-communications clearance requirement would be violated.
12 Even that make-ready design was not done during the abbreviated Osmose survey. More.
13 generally, Gulf Power's failure to acknowledge the requirement to cure NESC violations and
14 the essential role make-ready plays in such remediation makes Gulf Power's definition of full
15 capacity unrealistic. If a pole has attachments improperly placed, or improperly connected, it
16 is relatively simple to shift and/or reconnect them to provide for correction of violations and
17 the efficient use of pole space. Similarly, if a new attachment or existing attachments
18 necessitate a change-out to an incrementally taller pole that Gulf routinely uses and that is
19 available from Gulf's inventory, that too, is routine work. Gulf's CATV permitting
20 procedure provides that, once the new attacher pays Gulf for the cost of the make-ready work
21 for rearrangement or change-out, the Gulf engineer will grant the permit for the new
22 attachment. Not to do rearrangement and pole change-out if the space is needed would be
23 ridiculous, and inconsistent with industry custom and Gulf's own practices. Expanding pole

1 capacity is exactly what Gulf Power and all other power companies do when they need more
2 pole space or more pole line capacity.

3 Q: Have you reviewed "Gulf Power's Fifty Pole Identification," which was filed
4 with the Commission on January 20, 2006?

5 A: Yes.

6 Q: Would you please summarize your findings with regard to the 50 poles
7 contained in Gulf Power's Fifty Pole Identification?

8 A: Yes. Gulf Power's Fifty Pole Identification includes, in its attached Exhibit
9 A, materials relating to 40 poles reviewed by Gulf's pole surveyor, Osmose, and, in its
10 attached Exhibit B, materials concerning 10 poles for which a cable television provider
11 known as "Knology" paid Gulf Power for make-ready work several years ago. For the 40
12 Osmose-reviewed poles, Gulf Power has provided a spreadsheet listing certain measurements
13 of and between attachments on a particular day during April or May of 2005 when Osmose
14 visited each pole, together with pictures of the 40 poles taken when Osmose made its
15 observations. The spreadsheet also lists various alleged violations of the NESC or of Gulf
16 construction standards that Osmose contends it observed on those poles on the day when it
17 visited.

18 For the 10 Knology-related poles, Gulf Power has provided black and white copies of
19 pictures of 5 of the 10 poles; the pictures are very poor quality and do not indicate when they
20 were taken. From the pictures and related documents, it appears that Gulf Power performed
21 make-ready work on those five poles and that make-ready work done on the other poles was
22 done by communications companies. However, it is not clear whether the pictures show the

EXHIBIT 2

**DEPOSITION OF REX BROOKS
(EXCERPTS)**

Deposition of Rex Brooks

Complainants' Exhibit 85

Page 1, lines 1 through 23

Page 18, line 3 through Page 19, line 20

Page 21, lines 3 through 20

Page 26, line 2 through Page 28, line 23

Page 30, lines 9 through 19

Page 34, lines 2 through 22

Page 42, line 6 through Page 49, line 23

Page 54, line 1 through Page 57, line 23

Page 68, line 5 through Page 69, line 2

Page 75, lines 1 through 22

Page 83, lines 2 through 20

Page 86, line 3 through Page 87, line 23

Page 89, lines 3 through 21

Page 94, line 2 through Page 95, line 22

Page 103, line 2 through Page 104, line 22

Page 108, line 8 through Page 110, line 4

Page 133, line 20 through Page 134, line 5

1
2 Before The
3 FEDERAL COMMUNICATIONS COMMISSION
4 Washington, D.C. 20554
5
6
7 FLORIDA CABLE TELECOMMUNICATIONS
8 ASSOCIATION, INC., COX COMMUNICATIONS
9 GULF COAST, L.L.C., et al.,
10
11 Complainants,
12
13 vs. E.D. Docket No. 04-381
14
15 GULF POWER COMPANY,
16
17 Respondent.
18
19

20 DEPOSITION OF REX BROOKS

21 Taken by Lauren S. Dorgan, a Court Reporter
22 and Notary Public, State of Florida at Large, in
23 the offices of Beggs & Lane, LLP, 501 Commendancia
Street, Pensacola, Florida, on September 16, 2005,
commencing at approximately 9:00 a.m.

24 ANCHOR COURT REPORTING

25 229 South Baylen Street 6856 Caroline Street
26 Pensacola, Florida 32502 Milton, Florida 32561
27 (850) 432-2511 (850) 626-6207
28 FAX (850) 432-2302 FAX (850) 626-4589

29 LAUREN S. DORGAN, COURT REPORTER
30 (251) 990-3893

31 INDEX OF TRANSCRIPT

32 WITNESS:

33 REX BROOKS

34 Direct Examination by Mr. Seiver..... 5

35 Errata Sheet..... 141

36 Certificate of Witness..... 142

37 Reporter's Deposition Certificate..... 143

38 DEPOSITION EXHIBITS

39 EXHIBIT NO: PAGE:

40 Complainants' Exhibit No. 25 6

41 Complainants' Exhibit No. 26 105

42 Complainants' Exhibit No. 27 110

43 LAUREN S. DORGAN, COURT REPORTER
44 (251) 990-3893

45 APPEARANCES

46 FOR THE COMPLAINANTS:

47 JOHN D. SEIVER, ESQUIRE
48 Cole, Rayvid & Braverman, LLP
49 1919 Pennsylvania Avenue, N.W.
50 Washington, DC 20006

51 FOR THE RESPONDENT:

52 ERIC B. LANGLEY, ESQUIRE
53 Balch & Bingham, LLP
54 1710 Sixth Avenue North
55 Birmingham, Alabama 35203

56 RALPH A. PETERSON, ESQUIRE
57 Beggs & Lane
58 501 Commendancia Street
59 Pensacola, Florida 32501

60 COURT REPORTER:

61 LAUREN S. DORGAN

62 ANCHOR COURT REPORTING
63 229 South Baylen Street
64 Pensacola, Florida 32502
65 (850) 432-2511
66 1-800-563-6409
67 FAX: (850) 432-2302
68 AnchorReporters@aol.com

69 LAUREN S. DORGAN, COURT REPORTER
70 (251) 990-3893

71 STIPULATION

72 It is stipulated and agreed by
73 Counsel for the parties that the
74 deposition is taken for the purpose of
75 discovery and/or evidence; that all
76 objections save as to the form of the
77 question are reserved to the time of
78 trial; and that the reading and signing of
79 the deposition is not waived, together
80 with notice of the original hereof.
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

101 LAUREN S. DORGAN, COURT REPORTER
102 (251) 990-3893

Not Confidential as of 7/11/2006
Order FCC 06M-21

1 Q Up until I guess the year 2000 you used that FCC
2 formula for cable operator attachments; is that right?

3 A Yes.

4 Q Do you know why starting in 2000 there was a
5 change?

6 A My understanding is that it's due to the
7 mandatory access.

8 Q And as far as you knew up until 2000 or at any
9 point was Gulf Power voluntarily or willingly allowing
10 cable operators onto their poles?

11 A Yes.

12 Q As long as they executed an agreement and paid
13 make ready and paid the rental rate?

14 A Yes.

15 Q Was it your understanding it was the 1996 act
16 that had the mandatory access provisions?

17 A Yes.

18 Q Do you recall ever denying a cable operator the
19 opportunity to attach to a pole?

20 A Only in limited cases but mainly because of
21 engineering. Of course, you initially deny it even
22 for NESC situations where there's not enough room
23 until they're willing to pay the make ready, but there

LAUREN S. DORGAN, COURT REPORTER
(251) 990-3893

1 get their clearance underneath that platform and
2 maintain proper ground clearance you might have to go
3 up substantially with those two poles so that there's
4 too much strain on the line coming into it from the
5 adjacent poles, so you might have to object to
6 changing those out to anything taller because of those
7 constraints. And that hasn't been necessarily a
8 problem with some operators, just for that distance
9 they may go underground for a distance and then pop
10 back up.

11 Q As far as that is concerned specifically on the
12 situations where you just can't put a taller pole in
13 can you quantify how often that's happened?

14 A It's not that often.

15 Q Once a year, once every couple of years?

16 A I couldn't even speculate because you have not
17 only myself occasionally helping with some jobs,
18 you've got numerous engineering reps, I just don't
19 know.

20 Q But generally if a cable operator pays the make
21 ready or this third party attacher will pay the make
22 ready whatever it might be Gulf Power will go ahead
23 and do what is necessary to accommodate the attacher;

LAUREN S. DORGAN, COURT REPORTER
(251) 990-3893

1 were cases where because of engineering practice you
2 just physically could not change the height of the
3 pole possibly and they would just go underground for a
4 few spans.

5 MR. LANGLEY: John, so the record is clear
6 on this, were you asking about pre 1996
7 or ever?

8 MR. SEIVER: Pre '96.

9 MR. LANGLEY: Rex, did you understand the
10 question that way?

11 BY THE DEPENDENT:

12 A Yes.

13 Q I was going to say after 1996 did that process
14 that you just discussed change?

15 A No.

16 Q You mentioned in a few instances there might be
17 poles where for engineering you can't put a taller
18 pole in, can you give me example?

19 A If you're familiar with a regulator station it
20 regulates the voltage, it's a two pole configuration
21 with three regulators on a platform and because you're
22 limited sometimes in the change of your line going
23 from a shorter pole to a taller pole and in order to

LAUREN S. DORGAN, COURT REPORTER
(251) 990-3893

1 is that right?

2 A In general.

3 Q For purposes of the ongoing relationship I think
4 we've established that if the cable operator or
5 telecom carrier pays for a change out for a taller
6 pole there is no credit given back against the rental
7 for that, he continues to pay rent on the new pole; is
8 that right?

9 A Yes.

10 Q The poles are generally in five foot increments;
11 is that correct?

12 A Correct.

13 Q If for example a 40 foot pole is inadequate and
14 the operator pays for a 45 foot pole, who gets any
15 revenue that might come from the additional four feet
16 of space if you assume the operator is going to use
17 one of the five feet and the additional four foot of
18 space of that is running down to a third party?

19 A Gulf Power would get that additional space.

20 Q As far as the existing poles that are in the
21 field that are being changed out on these particular
22 situations where there's make ready would it be fair
23 to say that at the moment make ready is being done on

LAUREN S. DORGAN, COURT REPORTER
(251) 990-3893

EXHIBIT 3

**PRE-FILED DIRECT TESTIMONY OF
PATRICIA D. KRAVTIN
(EXCERPTS)**

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

Florida Cable Telecommunications
Association, Inc.; Comcast Cablevision of
Panama City, Inc.; Mediacom Southeast, L.L.C.;
and Cox Communications Gulf, L.L.C.,

EB Docket No. 04-381

Complainants,

v.

Gulf Power Company,

Respondent.

**PRE-FILED DIRECT TESTIMONY OF
PATRICIA D. KRAVTIN**

On behalf of Complainants

March 31, 2006

1 **PRE-FILED DIRECT TESTIMONY OF**
2 **PATRICIA D. KRAVTIN**

3
4
5 **INTRODUCTION**

6
7 **Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.**

8 **A. My name is Patricia D. Kravtin. I am an economist in private practice specializing**
9 **in the analysis of telecommunications, cable, and energy regulation and markets. My**
10 **business address is 57 Phillips Avenue, Swampscott, Massachusetts.**

11 **Experience and Qualifications**

12
13 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
14 **BACKGROUND.**

15 **A. I received a B.A. with Distinction in Economics from the George Washington**
16 **University. I studied in the Ph.D. program in Economics under a National Science**
17 **Foundation Fellowship at the Massachusetts Institute of Technology (M.I.T.). My fields**
18 **of concentration at M.I.T. were government regulation of industry, industrial**
19 **organization, and urban and regional economics.**

20 **My professional background includes a wide range of consulting experiences in regulated**
21 **industries. Between 1982 and 2000, I was a consultant at the national economic research**
22 **and consulting firm of Economics and Technology, Inc. (ETI) in that firm's regulatory**
23 **consulting group, where I held positions of increasing responsibility, including Senior**
24 **Vice President/Senior Economist.**

25 **Upon leaving ETI in September 2000, I began my own consulting practice specializing in**
26 **telecommunications, cable, and energy regulation and markets. I have testified or served**
27 **as an expert witness on telecommunications matters in proceedings before over thirty**

1 state, provincial, and federal regulatory commissions, including the Federal
2 Communications Commission ("FCC" or "Commission"), the Federal Energy Regulatory
3 Commission ("FERC"), and the Canadian Radio-television and Telecommunications
4 Commission ("CRTC").

5 In addition, I have testified as an expert witness in litigation before United States District
6 Court. I have served as an expert on matters relating to Section 253 of the
7 Telecommunications Act ("Removal of Barriers to Entry") before the United States
8 District Court for the Eastern District of New York, the Northern District of New York,
9 and the Southern District of California. I have also testified before the United States
10 District Court for the Eastern District of Tennessee in antitrust cases relating to
11 telecommunications competition and market power. I have also testified before a number
12 of state legislative committees and served as advisor to a number of state regulatory
13 agencies.

14 Of particular relevance to this proceeding, I have testified as an expert on pole attachment
15 and other related matters before various municipal, state, provincial, and federal agencies,
16 including this Commission, on numerous occasions.

17 **Q. HAVE YOU PREPARED A DETAILED SUMMARY OF YOUR**
18 **EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE?**

19 **A.** Yes. A detailed resume summarizing my training, previous experience, and prior
20 testimony and reports is provided as Attachment 1 to this testimony.

21

1 The distinction between crowding and full capacity has been described in the economic
2 literature as follows:

3
4 Congestion refers to the costs arising from crowding effects (too
5 many users in the system), and *scarcity is a situation of*
6 *exclusion of some firms from the system due to lack of*
7 *capacity.*²⁵

8
9 That Gulf Power chooses to define the concepts of crowded and full capacity as
10 equivalent, practically or otherwise, for purposes of this case, does not in anyway alter
11 the fundamental economic distinction between the two.

12 Similarly, that the Osmose Statement of Work defines the concepts of crowding or full
13 capacity as one and the same ("to mean a pole that cannot host another attachment
14 without rearrangement or changeout"²⁶) only means the results of the Osmose survey are
15 flawed, not that the two concepts are equivalent from a true economic perspective.

16 A bigger problem with Gulf Power 's definition of full capacity, however, is its failure to
17 take into account the dynamic state-of-being inherent to poles.

18 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE DYNAMIC STATE-OF-**
19 **BEING INHERENT TO POLES AND GULF POWER'S FAILURE TO**
20 **TAKE THAT INTO ACCOUNT IN ITS DEFINITION OF FULL**
21 **CAPACITY.**

22 **A.** An inherent economic characteristic of pole capacity is that, under normal
23 operating conditions of production, it is *not* fixed in the short-run. Rather, it is dynamic

²⁵ Gustavo Nombela, Gines de Rus, and Ofelia Betancor, *Competitive and Sustainable Growth Programme and Marginal Cost for Transport Efficiency, UNITE (Unification of accounts) WP7: User Costs and Benefits, Case Study 7: Evaluation of Congestion Costs for Madrid Airport (1997-2000), Version 2.0, 30 April 2002, emphasis added.*

²⁶ Gulf Power Non-Binding Proffer of "Full Capacity" Pole Evidence, October 17, 2005, at 2.

1 in nature, and any economically meaningful definition of full capacity for poles will
2 reflect this dynamic state-of-being inherent to poles. In the overwhelming majority of
3 cases, by Gulf Power's own admission, additional attachments can (and are)
4 accommodated in the course of normal and customary operating practices of pole owners,
5 including pole rearrangements and change-outs.²⁷ In this very real economic sense,
6 therefore, pole capacity is not static or finite.

7 Generally speaking, it is the fixed nature characteristic of most inputs that limit capacity
8 or scale of operations. All inputs are ultimately variable in the long run, but what makes
9 poles unique, is their inherent ability to provide for greater effective capacity in the
10 "shortest" of short-runs. Productive capacity on poles can be harnessed generally as fast
11 as the paperwork can be processed, and a technician can be called down to rearrange
12 attachments or a taller pole can be transferred from inventory.

13 This economic attribute of poles distinguishes poles from other assets (e.g., land, marina
14 space) for which valuation methods cited by Gulf Power have been applied, and means
15 that an additional attachment is, as a general proposition, non-rival with respect to current
16 and potential pole attachments.

17 The condition of full capacity exists in the economic sense when capacity is truly zero
18 sum, such that one entity's presence on the pole actually deprives another of the ability to
19 attach to that pole. For a resource to be at full capacity necessarily requires that capacity
20 be fixed in a short run sense. To the extent Gulf Power is able through normal and

²⁷ See Gulf Response to Second Request No. 8, also Gulf Power's Motion to Reconsider Limited Portions of Second Discovery Order at 1, September 30, 2005; Deposition of Thomas Forbes, November 17, 2005, 133-136.

1 customary business practices (i.e., make-ready, rearrangements and pole changeouts) to
2 harness greater effective pole capacity in the present time frame, it makes no sense from
3 an economics perspective to say the pole is at full capacity. Indeed, the power
4 company's routine practice of accommodating additional attachments of poles is the
5 antithesis of a "zero sum" situation.

6 **Q. IN WHAT RESPECTS IS GULF POWER'S ROUTINE PRACTICE OF**
7 **ACCOMMODATING ADDITIONAL ATTACHMENTS THE**
8 **ANTITHESIS OF A "ZERO SUM" SITUATION?**

9 **A.** After performing what is routine work on the pole (for which it is compensated by
10 the incremental attacher through make-ready pursuant to Section 224), the power
11 company does not have to displace an existing attachment, or turn away another
12 attachment. In fact, the power company is typically able to accommodate even more
13 attachments after the routine work has been performed, than it was before.

14 It is a totally perverse economic result under such circumstances as just described to
15 identify such a pole as being at "full capacity," and on that basis allow the power
16 company to charge not only the additional cable attacher but other pre-existing cable
17 attachers a rate higher than the cable rate (which is already in excess of marginal cost).
18 Such an outcome violates the cost-causation principles underlying Section 224, by
19 requiring pre-existing attachers, who were not the cause agents in any principal respect,
20 to pay more than they were paying before the pole change-out or rearrangement.

21 **Q. WHAT IS GULF POWER'S POSITION REGARDING THE DYNAMIC**
22 **APPROACH TO FULL CAPACITY YOU DESCRIBE ABOVE?**

23 **A.** Gulf Power's position is that adopting a dynamic approach to full capacity would
24 make it impossible for Gulf Power to meet its burden since, as Gulf Power acknowledges,

1 “virtually *any* pole can be changed out.”²⁸ This is a strawman argument, and one that is
2 not valid for several reasons.

3 First, there are a number of real-world situations where it will not be possible for the
4 power company to harness greater effective capacity on a pole. Some examples
5 identified by the Complainants include:

6 “For example, a layer of impenetrable rock may exist underneath the pole
7 precluding a taller pole from being sunk low enough in the ground as
8 required by applicable engineering codes; a height limit may be imposed
9 by the Federal Aviation Administration for poles in a given geographic
10 area; an overpass or other cables or wires (e.g., electric transmission lines,
11 streetcar wires, etc.) might interfere with placement of a taller pole; or a
12 50 foot pole might have so many attachments as to render it “full,” but no
13 taller 55 pole exists in inventory.”²⁹
14

15 Second, while these types of situations where pole change-outs cannot practically occur
16 due to terrain, obstructions, or zoning restrictions may be limited in nature, they are the
17 only *true* instances where poles can be characterized as zero sum or rivalrous in nature.
18 Hence, such instances are the only legitimate, economically valid cases where a potential
19 finding of “full capacity” can be made, and the type of evidence Gulf Power must provide
20 in order to meet its burden of proof in this case with respect to the first of the two *APCO*
21 criteria. Under the two-prong test established in *APCo*, the power company would still
22 have to prove the existence of an actual lost opportunity either in the form of a “bidding
23 firm” or “higher valued use” of the power company that was actually turned away or
24 precluded.

²⁸ Gulf Power’s Motion to Reconsider Limited Portions of Second Discovery Order, September 30, 2005, at 4.

²⁹ Complainants’ Responses to Gulf Power’s First Set of Interrogatories and Document Requests, April 18, 2005, at 18.

1 That Gulf Power may deny access for reasons of “insufficient capacity” does not affect
2 this fundamental economic reality of full capacity. Moreover, Gulf Power’s ability to
3 deny under Section 224 is not absolute; it must be agreed upon and carried out on a non-
4 discriminatory basis. Since Gulf Power routinely performs make-ready, rearrangements,
5 and pole changeouts for itself, its joint pole owners, and other third-party attachers, it
6 would seem Gulf Power would not be able to refuse to perform make-ready at its own
7 unfettered discretion and for the sole purpose of being able to charge a higher “just
8 compensation” rate to a particular class of (cable) attachers.

9 Because Gulf Power’s ability to seek additional compensation in excess of marginal cost
10 is tied to the demonstration of full capacity (in conjunction with lost opportunity), it is
11 obviously in Gulf Power’s own interest to embrace a definition of full capacity that
12 would encompass the largest number of poles possible. Gulf Power’s position that the
13 need for, or the previous occurrence of make-ready work to accommodate an additional
14 pole attachment, in and of itself,³⁰ demonstrates a condition of “full capacity” is
15 consistent with such a strategy.

16 However, the relative frequency of “full capacity” poles has no substantive bearing on
17 the validity of the economic concept of full capacity. If anything, since Gulf Power is
18 already receiving just compensation for use of its poles, there should be no expectation of
19 a large number of poles that would qualify for additional compensation under the *APCo*
20 criteria.

³⁰ See, e.g., Gulf’s Non-Binding Proffer of “Full Capacity” Pole Evidence, October 17, 2005, at 2.

EXHIBIT 4

**TESTIMONY OF MICHAEL DUNN
(EXCERPTS)**

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

IN THE MATTER OF)	EB Docket No.
)	04-381
FLORIDA CABLE TELECOMMUNICATIONS)	
ASSOCIATION, INC.; COMCAST CABLEVISION))	
OF PANAMA CITY, INC.; MEDIACOM)	
SOUTHEAST, L.C.C.; AND COX)	
COMMUNICATIONS GULF, L.C.C.,)	
)	
Complainants,)	
)	
v.)	
)	
GULF POWER COMPANY,)	
)	
Respondent.)	

VOLUME 6

Federal Communications Commission
Hearing Room A, TW A-363
445 12th Street, SW
Washington, D.C.

Monday,
April 24, 2006

BEFORE:

RICHARD L. SIPPEL
Chief Administrative Law Judge

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

APPEARANCES

On Behalf of the Federal Communications
Commission:

LISA B. GRIFFIN, ESQ.
RHONDA J. LIEN, ESQ.
JAMES SHOOK, ESQ.
Enforcement Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554
(202) 418-7273

On Behalf of Florida Cable Telecommunications
Association, Inc., et al.:

JOHN D. SEIVER, ESQ.
GEOFFREY C. COOK, ESQ.
Of: Cole, Raywid, & Braverman, L.L.P.
1919 Pennsylvania Avenue, N.W.
Second Floor
Washington, D.C. 20006
(202) 659-9750

MICHAEL GROSS, ESQ.
Of: FCTA
246 East 6th Avenue
Tallahassee, FL 32303
(850) 681-1990

On Behalf of Gulf Power Company:

ERIC B. LANGLEY, ESQ.
J. RUSS CAMPBELL, ESQ.
ALLEN M. ESTES, ESQ.
RALPH PETERSON, ESQ.
Of: Balch & Bingham, LLP
1710 Sixth Avenue North
P.O. Box 306 (35201)
Birmingham, Alabama 35203
(205) 226-8772

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ALSO PRESENT:

MICHAEL GROSS, Technical Advisor
JUDY EASTERDAY, Technical Advisor

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

C-O-N-T-E-N-T-S

	PAGE
OPENING STATEMENT FOR RESPONDENT	634
OPENING STATEMENT FOR COMPLAINANTS	667
<u>WITNESS</u>	<u>DIR</u> <u>CROSS</u> <u>REDIR</u> <u>RECROSS</u>
MICHAEL DUNN	698 701 837 884

<u>EXHIBIT</u>	<u>DESCRIPTION</u>	<u>MARK RECD</u>
A	Michael Dunn Testimony	701

Start Time: 9:09 a.m.

Lunch Break: 11:59 a.m. to 1:17 p.m.

End Time: 3:57 p.m.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 testimony. They have to say that my opinion is based
2 on what I've read and what I've heard in court. And I
3 think I'm entitled to receive that in that fashion. So
4 I'm going to overrule the objection.

5 Let me ask Mr. Dunn, would you rise, sir,
6 and please raise your right hand.

7 Whereupon,

8 MICHAEL DUNN

9 was called as a witness by counsel for the
10 complainants and, after having been first duly sworn,
11 was examined and testified as follows:

12 JUDGE SIPPEL: Please be seated.

13 Mr. Campbell.

14 DIRECT EXAMINATION BY COUNSEL FOR RESPONDENT

15 BY MR. CAMPBELL:

16 Q Mr. Dunn, are you the same Michael R.
17 Dunn that submitted in this proceeding prefiled written
18 direct testimony that has been marked for purposes of
19 identification as Gulf Power Exhibit A?

20 A Yes, I am.

21 Q Do you have any corrections to
22 your testimony that you would like to make before we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Q Real work practical application. When you
2 were saying you could only apply what APCO's language
3 has to mean, why did you choose that language?

4 A Because to me crowding, it means that -
5 and fully occupied means the same thing, that there is
6 no space for another attachment.

7 Q So in your testimony, then, full capacity
8 would be no space without a rearrangement or make-ready
9 for another attachment; is that right?

10 A I don't take it as far as changing the
11 pole out. Because as I read it, it's talking about a
12 pole. And so crowding to me would be a pole that you
13 could not rearrange. That pole to make space for
14 another attachment.

15 Q So it's a pole that could not be
16 rearranged to make space, would be crowded.

17 A But rearranged does not mean replaced to
18 me.

19 Q So rearrangeable pole would not be at full
20 capacity?

21 A I wouldn't think so.

22 Q Now on crowding there had been some

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

EXHIBIT 5

**EXCERPTS OF CABLE TELEVISION POLE
ATTACHMENT AGREEMENTS**

POLE ATTACHMENT AGREEMENT

This Agreement is made and entered into the 1st day of January, 1997, by and between Gulf Power Company, a Maine corporation, hereinafter called "Gulf," and TWC Cable Partners dba Emerald Coast Cable Television, hereinafter called "Licensee."

WITNESSETH:

WHEREAS, Licensee is providing cable communication services in the area described in Exhibit A, attached hereto, which service requires the installation and maintenance of cables, wires and appliances; and

WHEREAS, Licensee has attached certain cables, wires and appliances to the poles of Gulf pursuant to an Agreement dated November 19, 1993; and

WHEREAS, Gulf is willing to allow the attachment of cables, wires and appliances to its poles in the area described in Exhibit A where, in Gulf's judgment, that attachment will not interfere with its own service requirements, including considerations of economy and safety, and where Gulf is protected and indemnified against all reasonable costs to and liabilities against it arising from such attachment.

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained Gulf and Licensee hereby agree and contract with each other as follows:

1. Term of Agreement. The term of this Agreement shall commence on the 1st day of January, 1997 and subject to all of the provisions of this Agreement, shall continue in full force and effect thereafter until the 31st day of December, 2001 unless earlier terminated according to the provisions of this Agreement. The parties may agree to extend this Agreement for an

12. Make Ready, Substitutions, Changes and Rearrangements.

A. Make Ready. If it should appear to Gulf that a pole is too short, or inadequate, or any rearrangement of Gulf's or other parties' facilities is required to accommodate the attachments of Licensee, Gulf shall notify Licensee of the pole substitutions, additions, changes and rearrangements which Gulf deems necessary and their estimated cost. Such notice shall constitute a denial of the applicable permit(s) unless Licensee authorizes Gulf to make the substitutions, additions, changes and rearrangements specified. Licensee shall authorize the make ready work within thirty (30) days after notification from Gulf, otherwise the permit will be denied. Upon such authorization, Licensee shall reimburse Gulf for all costs incurred by it in connection with such changes. Licensee shall reimburse the owner of any other facilities attached to that pole for any reasonable expense incurred by that owner in conjunction with such changes. Licensee shall pay to Gulf at the time of the issuance of each attachment permit Gulf's estimated cost of providing the space for all of the attachments covered by that permit pursuant to Section 3 of this Agreement.

In the event the Licensee elects to install its facilities underground in Gulf's pole line, they shall remain underground for a minimum of five (5) spans before attaching to Gulf's poles. Where Licensee shows sufficient reason, Gulf may grant a waiver of this provision in specific cases.

B. Substitutions, Changes, and Rearrangements. Licensee shall, at its own expense, install the attachments and maintain them in safe condition in a manner satisfactory to Gulf. Licensee shall, at its own expense, at any time requested by Gulf for good cause remove, relocate, replace, and renew its facilities on the poles, transfer them to substituted poles or perform any other work in connection with the facilities that Gulf may require. Licensee

shall notify Gulf immediately after completing the requested work. If the Licensee fails to comply with Gulf's request within thirty (30) days of receipt of such request, Gulf may perform or have performed such work at Licensee's expense with no liability therefor. Licensee shall pay Gulf its cost for such work plus fifteen (15%) percent.

In any case deemed by Gulf to be an emergency, Gulf may, at the expense of Licensee, arrange to remove, relocate, replace or renew the facilities of Licensee, transfer them to substituted poles or perform any other work in connection with the facilities that may be required in the maintenance, replacement, removal or relocation of the poles or the facilities on them. Gulf will invoice Licensee for actual expenses incurred in performing these emergency measures. Gulf shall take reasonable steps to notify the Licensee prior to performing any work on the Licensee's facilities.

13. Use of Qualified Employees and Contractors. The Licensee shall ensure that its employees and contractors are knowledgeable of the requirements of the NESC and other safe work practice codes for maintaining proper work practices in order to avoid dangerous conditions. Licensee expressly agrees to take all necessary steps to ensure that its employees and contractors are adequately trained and qualified to work with and around energized conductors, and shall further ensure that its employees and contractors are appropriately and strictly supervised while performing work on Gulf's poles. Licensee agrees to indemnify and hold harmless Gulf for any failure of Licensee, its employees or contractors to fulfill their obligations to perform work in a safe and proper manner.

CABLE TELEVISION ATTACHMENT AGREEMENT

This Agreement is made and entered into the 17th day of March, 1995, by and between Gulf Power Company, a Maine corporation, hereinafter called "Gulf," and Comcast Cablevision of Panama City, Inc., hereinafter called "CATV Company."

WITNESSETH:

WHEREAS, CATV Company desires to furnish cable television service in the area described in Exhibit A, attached hereto, which service will require the installation and maintenance of cables, wires and appliances; and

WHEREAS, CATV Company desires to attach certain cables, wires and appliances to the poles of Gulf; and

WHEREAS, Gulf is willing to allow the attachment of cables, wires and appliances to its poles in the area described in Exhibit A where, in Gulf's judgment, that attachment will not interfere with its own service requirements, including considerations of economy and safety, and where Gulf is protected and indemnified against all costs to and liabilities against it arising from such attachment.

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained Gulf and CATV Company hereby agree and contract with each other as follows:

1. Term of Agreement. The term of this Agreement shall commence on the 1st day of March, 1995 and subject to all of the provisions of this Agreement, shall continue in full force and effect thereafter until the 29th day of February, 2000 unless earlier terminated according to the provisions of this Agreement. The parties may agree to extend this Agreement for an additional five (5) year period and for consecutive five (5) year periods upon

12. Make Ready, Substitutions, Changes and Rearrangements.

A. Make Ready. If it should appear to Gulf that a pole is too short, or inadequate, or any rearrangement of Gulf's or other parties' facilities is required to accommodate the attachments of CATV company, Gulf shall notify CATV company of the pole substitutions, additions, changes and rearrangements which Gulf deems necessary and their estimated cost. Such notice shall constitute a denial of the applicable permit(s) unless CATV company authorizes Gulf to make the substitutions, additions, changes and rearrangements specified. CATV Company shall authorize the make ready work within thirty (30) days after notification from Gulf, otherwise the permit will be denied. Upon such authorization, CATV Company shall reimburse Gulf for all costs incurred by it in connection with such changes. CATV company shall reimburse the owner of any other facilities attached to that pole for any reasonable expense incurred by that owner in conjunction with such changes. CATV company shall pay to Gulf at the time of the issuance of each attachment permit Gulf's estimated cost of providing the space for all of the attachments covered by that permit pursuant to Section 3 of this Agreement.

In the event the CATV Company elects to install their facilities underground in Gulf's pole line, they shall remain underground for a minimum of five (5) spans before attaching to Gulf's poles. Where CATV Company shows sufficient reason, Gulf may grant a waiver of this provision in specific cases.

B. Substitutions, Changes, and Rearrangements. CATV Company shall, at its own expense, install the attachments and maintain them in safe condition in a manner satisfactory to Gulf. CATV Company shall, at its own expense, at any time requested by Gulf for good cause remove, relocate, replace, and repair its facilities on the poles, transfer them to substituted poles or perform any other work in connection with the facilities that Gulf

may require. CATV Company shall notify Gulf immediately after completing the requested work. If the CATV Company fails to comply with Gulf's request within thirty (30) days of receipt of such request, Gulf may perform or have performed such work at CATV Company's expense with no liability therefor. CATV Company shall pay Gulf its cost for such work plus fifteen (15%) percent.

In any case deemed by Gulf to be an emergency, Gulf may, at the expense of CATV Company, arrange to remove, relocate, replace or renew the facilities of CATV Company, transfer them to substituted poles or perform any other work in connection with the facilities that may be required in the maintenance, replacement, removal or relocation of the poles or the facilities on them. Gulf will invoice CATV Company for actual expenses incurred in performing these emergency measures.

13. Use of Qualified Employees and Contractors. The CATV Company shall ensure that its employees and contractors are knowledgeable of the requirements of the NESC and other safe work practice codes for maintaining proper work practices in order to avoid dangerous conditions. CATV Company expressly agrees to take all necessary steps to ensure that its employees and contractors are adequately trained and qualified to work with and around energized conductors, and shall further ensure that its employees and contractors are appropriately and strictly supervised while performing work on Gulf's poles. CATV Company agrees to indemnify and hold harmless Gulf Power Company for any failure of CATV Company, its employees or contractors to fulfill their obligations to perform work in a safe and proper manner.

14. Damage to Facilities. CATV Company shall exercise caution to avoid damage to facilities of Gulf and of others on Gulf's poles. CATV Company assumes responsibility for any and all loss or expense arising out of such damage caused by it and shall reimburse Gulf or others occupying

POLE ATTACHMENT AGREEMENT

This Agreement is made and entered into the 1st day of January, 1997, by and between Gulf Power Company, a Maine corporation, hereinafter called "Gulf," and Cox Communications Pensacola, Inc., hereinafter called "Licensee."

WITNESSETH:

WHEREAS, Licensee is providing cable communication services in the area described in Exhibit A, attached hereto, which service requires the installation and maintenance of cables, wires and appliances; and

WHEREAS, Licensee has attached certain cables, wires and appliances to the poles of Gulf pursuant to an Agreement dated December 10, 1991; and

WHEREAS, Gulf is willing to allow the attachment of cables, wires and appliances to its poles in the area described in Exhibit A where, in Gulf's judgment, that attachment will not interfere with its own service requirements, including considerations of economy and safety, and where Gulf is protected and indemnified against all reasonable costs to and liabilities against it arising from such attachment.

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained Gulf and Licensee hereby agree and contract with each other as follows:

1. Term of Agreement. The term of this Agreement shall commence on the 1st day of January, 1997 and subject to all of the provisions of this Agreement, shall continue in full force and effect thereafter until the 31st day of December, 2001 unless earlier terminated according to the provisions of this Agreement. The parties may agree to extend this Agreement for an

12. Make Ready, Substitutions, Changes and Rearrangements.

A. Make Ready. If it should appear to Gulf that a pole is too short, or inadequate, or any rearrangement of Gulf's or other parties' facilities is required to accommodate the attachments of Licensee, Gulf shall notify Licensee of the pole substitutions, additions, changes and rearrangements which Gulf deems necessary and their estimated cost. Such notice shall constitute a denial of the applicable permit(s) unless Licensee authorizes Gulf to make the substitutions, additions, changes and rearrangements specified. Licensee shall authorize the make ready work within thirty (30) days after notification from Gulf, otherwise the permit will be denied. Upon such authorization, Licensee shall reimburse Gulf for all costs incurred by it in connection with such changes. Licensee shall reimburse the owner of any other facilities attached to that pole for any reasonable expense incurred by that owner in conjunction with such changes. Licensee shall pay to Gulf at the time of the issuance of each attachment permit Gulf's estimated cost of providing the space for all of the attachments covered by that permit pursuant to Section 3 of this Agreement.

In the event the Licensee elects to install its facilities underground in Gulf's pole line, they shall remain underground for a minimum of five (5) spans before attaching to Gulf's poles. Where Licensee shows sufficient reason, Gulf may grant a waiver of this provision in specific cases.

B. Substitutions, Changes, and Rearrangements. Licensee shall, at its own expense, install the attachments and maintain them in safe condition in a manner satisfactory to Gulf. Licensee shall, at its own expense, at any time requested by Gulf for good cause remove, relocate, replace, and renew its facilities on the poles, transfer them to substituted poles or perform any other work in connection with the facilities that Gulf may require. Licensee

shall notify Gulf immediately after completing the requested work. If the Licensee fails to comply with Gulf's request within thirty (30) days of receipt of such request, Gulf may perform or have performed such work at Licensee's expense with no liability therefor. Licensee shall pay Gulf its cost for such work plus fifteen (15%) percent.

In any case deemed by Gulf to be an emergency, Gulf may, at the expense of Licensee, arrange to remove, relocate, replace or renew the facilities of Licensee, transfer them to substituted poles or perform any other work in connection with the facilities that may be required in the maintenance, replacement, removal or relocation of the poles or the facilities on them. Gulf will invoice Licensee for actual expenses incurred in performing these emergency measures. Gulf shall take reasonable steps to notify the Licensee prior to performing any work on the Licensee's facilities.

13. Use of Qualified Employees and Contractors. The Licensee shall ensure that its employees and contractors are knowledgeable of the requirements of the NESC and other safe work practice codes for maintaining proper work practices in order to avoid dangerous conditions. Licensee expressly agrees to take all necessary steps to ensure that its employees and contractors are adequately trained and qualified to work with and around energized conductors, and shall further ensure that its employees and contractors are appropriately and strictly supervised while performing work on Gulf's poles. Licensee agrees to indemnify and hold harmless Gulf for any failure of Licensee, its employees or contractors to fulfill their obligations to perform work in a safe and proper manner.

ASSIGNMENT AGREEMENT

THIS ASSIGNMENT AGREEMENT is made and entered into and effective as of the 23 rd day of January, 1998 ("Closing Date") by and between Gulf Power Company, hereinafter called Licensor and Mediacom Southeast LLC, hereinafter called Licensee.

WITNESSETH:

WHEREAS, Licensor has previously entered into pole attachment agreements with U. S. Cable Television Group, L. P. ("U. S. Cable");

WHEREAS, U. S. Cable desires to assign its rights and obligations under the pole attachment agreements to Licensee, as of the Closing Date; and

WHEREAS, Licensor desires to consent to such assignment under the terms and conditions herein stated.

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements herein contained, Licensor and Licensee hereby agree as follows:

1. Licensor hereby consents to the assignment to Licensee on the Closing Date of the following pole attachment agreement with the following entities:

U. S. Cable Television Group, L. P. - pole attachment agreement dated 05/01/95

2. Licensee does hereby covenant and agree to do and perform each of the covenants and undertakings of the aforesaid agreements, arising from and after the Closing Date, to pay each sum of money required to be paid under each agreement to the full extent as if such agreements had been originally made with Licensee.

3. Licensor and Licensee agree that the terms and conditions of the aforesaid agreements shall continue in full force and effect and no modification to such terms and conditions shall be

made during the term of such agreements, except modifications which may be required for safety, operational or other related reasons.

4. Licensee covenants and agrees to indemnify, protect and hold Licensor harmless from any against any and all claims, damages and other costs (including attorney's fees) relating to the obligations of U. S. Cable under the agreements.

5. Licensee shall pay all outstanding debts owed to Licensor by U. S. Cable currently due or that may come due in the future under the aforesaid agreements.

6. Nothing contained in this Assignment Agreement shall serve to discharge U. S. Cable, or the respective sureties of U. S. Cable, from any liability accrued or accruing under the aforesaid agreements.

IN WITNESS WHEREOF, the parties hereto have caused this Assignment Agreement to be duly executed by their respective corporate officers thereunto duly authorized as the day, month and year first written above.

ATTEST:

Linda G. Malone
ASST. CORPORATE SECRETARY

ATTEST:

Rocco B. Commisso

LICENSOR:

GULF POWER COMPANY

BY: [Signature]
VICE PRESIDENT, POWER
DELIVERY AND CUSTOMER
OPERATIONS

LICENSEE:

SOUTHEAST
MEDIACOM LLC

By: Mediacom LLC, a Member

BY: [Signature]
Rocco B. Commisso, its Manager

CABLE TELEVISION ATTACHMENT AGREEMENT

This Agreement is made and entered into the 1st day of May, 1995, by and between Gulf Power Company, a Maine corporation, hereinafter called "Gulf," and U. S. Cable Television Group, L. P., hereinafter called "CATV Company."

WITNESSETH:

WHEREAS, CATV Company desires to furnish cable television service in the area described in Exhibit A, attached hereto, which service will require the installation and maintenance of cables, wires and appliances; and

WHEREAS, CATV Company desires to attach certain cables, wires and appliances to the poles of Gulf; and

WHEREAS, Gulf is willing to allow the attachment of cables, wires and appliances to its poles in the area described in Exhibit A where, in Gulf's judgment, that attachment will not interfere with its own service requirements, including considerations of economy and safety, and where Gulf is protected and indemnified against all costs to and liabilities against it arising from such attachment.

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained Gulf and CATV Company hereby agree and contract with each other as follows:

1. Term of Agreement. The term of this Agreement shall commence on the 1st day of May, 1995 and subject to all of the provisions of this Agreement, shall continue in full force and effect thereafter until the 30th day of June, 2000 unless earlier terminated according to the provisions of this Agreement. The parties may agree to extend this Agreement for an additional five (5) year period and for consecutive five (5) year periods upon

CATV companies contracting with Gulf for pole attachments shall attach above the telephone facilities. Among two (2) or more CATV companies, position of attachments on the pole shall be determined according to the date of the original agreement between the CATV company and Gulf for a given area, or the date of any amendment to such agreement to expand to a given area. In any given area, the CATV company with the earliest agreement or amended agreement shall occupy the first position above the telephone facilities, if space is available. The second CATV company shall attach to the second position above the telephone facilities, if space is available; and so on.

B. When two (2) or more CATV companies desire to attach to the same Gulf poles, preference for attachment will be given in order of application for permit received. The attaching CATV company shall attach in their assigned space, according to Section 11.A., if space is available. If any company with priority under paragraph 11.A. above, has not exercised its right to attach to space on a given pole, companies attaching under subsequent agreements may make provisional attachment in the space which ordinarily would be available to the company with priority, if their own assigned space is not available. However, if the company having priority subsequently requests attachment rights, any other companies with attachments in the area to which the earlier companies have priority shall relinquish their position and reattach their facilities farther up the pole as provided in Section 12 below. The company requesting attachment rights shall pay all make ready costs, if any, associated with such reattachment, and contact the other companies to initiate their transfer.

12. Make Ready, Substitutions, Changes and Rearrangements.

A. Make Ready. If it should appear to Gulf that a pole is too short, or inadequate, or any rearrangement of Gulf's or other parties' facilities is required to accommodate the attachments of CATV company,

Gulf shall notify CATV company of the pole substitutions, additions, changes and rearrangements which Gulf deems necessary and their estimated cost. Such notice shall constitute a denial of the applicable permit(s) unless CATV company authorizes Gulf to make the substitutions, additions, changes and rearrangements specified. CATV Company shall authorize the make ready work within thirty (30) days after notification from Gulf, otherwise the permit will be denied. Upon such authorization, CATV Company shall reimburse Gulf for all costs incurred by it in connection with such changes. CATV company shall reimburse the owner of any other facilities attached to that pole for any reasonable expense incurred by that owner in conjunction with such changes. CATV company shall pay to Gulf at the time of the issuance of each attachment permit Gulf's estimated cost of providing the space for all of the attachments covered by that permit pursuant to Section 3 of this Agreement.

In the event the CATV Company elects to install their facilities underground in Gulf's pole line, they shall remain underground for a minimum of five (5) spans before attaching to Gulf's poles. Where CATV Company shows sufficient reason, Gulf may grant a waiver of this provision in specific cases.

B. Substitutions, Changes, and Rearrangements. CATV Company shall, at its own expense, install the attachments and maintain them in safe condition in a manner satisfactory to Gulf. CATV Company shall, at its own expense, at any time requested by Gulf for good cause remove, relocate, replace, and renew its facilities on the poles, transfer them to substituted poles or perform any other work in connection with the facilities that Gulf may require. CATV Company shall notify Gulf immediately after completing the requested work. If the CATV Company fails to comply with Gulf's written request within thirty (30) days of receipt of such written request, Gulf may perform or have performed such work at CATV

Company's expense with no liability therefor. CATV Company shall pay Gulf its reasonable cost for such work plus fifteen (15%) percent.

In any case deemed by Gulf to be an emergency, Gulf may, at the expense of CATV Company, arrange to remove, relocate, replace or renew the facilities of CATV Company, transfer them to substituted poles or perform any other work in connection with the facilities that may be required in the maintenance, replacement, removal or relocation of the poles or the facilities on them. Gulf will invoice CATV Company for actual expenses incurred in performing these emergency measures.

13. Use of Qualified Employees and Contractors. The CATV Company shall ensure that its employees and contractors are knowledgeable of the requirements of the NESC and other safe work practice codes for maintaining proper work practices in order to avoid dangerous conditions. CATV Company expressly agrees to take all necessary steps to ensure that its employees and contractors are adequately trained and qualified to work with and around energized conductors, and shall further ensure that its employees and contractors are appropriately and strictly supervised while performing work on Gulf's poles. CATV Company agrees to indemnify and hold harmless Gulf Power Company for any failure of CATV Company, its employees or contractors to fulfill their obligations to perform work in a safe and proper manner.

14. Damage to Facilities. CATV Company shall exercise caution to avoid damage to facilities of Gulf and of others on Gulf's poles. CATV Company assumes responsibility for any and all loss or expense arising out of such damage caused by it and shall reimburse Gulf or others occupying Gulf's poles for such loss or expense. CATV Company shall immediately report damage caused by it to Gulf and to others occupying Gulf's poles which are in any way affected by such damage.